

Linguistic Relativity in SLA: Thinking for Speaking

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Over the past few decades, Second Language Acquisition (SLA) research has shown a growing interest in linguistic relativity, specifically in Slobin's (1987, 1996) *thinking-for-speaking hypothesis*. The thinking-for-speaking hypothesis posits that language-specific structures direct the speaker's attention to specific aspects of objects and events; such perceived information is then organized according to what can be grammatically coded in the speaker's first language (L1s). This volume probes a possible interference of L1-based cognition with second language (L2) development. As pointed out by ZhaoHong Han, the first editor, this volume regards Slobin's thinking-for-speaking hypothesis as one of the several promising accounts for such SLA phenomena as inter- and intra- learner variability, as well as fossilization.

This edited volume comprises six studies and two theoretical papers, preceded by a preface and followed by a reference list and an index. One strength of the volume is the variety of articles selected. Building on the typical scope of thinking-for-speaking studies – namely the lexicalization patterns studies within Talmy's (1985, 2000a, 2000b) typological framework, they utilize different methodological designs, such as longitudinal case studies (Chapters 3, 6, and 7), as well as qualitative (especially Chapters 6 and 7) and quantitative methods (all chapters). The constructs under scrutiny range from the lexicalization patterns of motion events (Chapters 1, 2, and 3), gesture (Chapter 3), memory for spatial relations vis-à-vis English prepositions (Chapter 4), and use and representation of grammatical morphemes (Chapters 2, 6, and 7). The chapters address different issues within the thinking-for-speaking framework: the varying degrees of L1 constraints on the process of L2 acquisition vis-à-vis L1-L2 typological differences (Chapters 1 and 4); the developmental aspects of interlanguage concepts (Chapters 3, 6, and 7); issues of ultimate attainment (Chapters 2, 3, and 8); and conceptual works that define the role of linguistic relativity in SLA (Chapters 5 and 8). In the following review, I am going to take a critical look at the chapters in terms of their themes, the order of lexicalization pattern studies, (Chapters 1-3) and that of morphological studies, (Chapters 6 and 7), conceptual works defining the role of relativity in SLA (Chapters 5 and 8), and the study of the possible influences of L1 on one's cognition (Chapter 4), a fundamental issue of relativity in the study of SLA.

In Chapter 1, Teresa Cadierno, the second editor of this volume, examines how the varying degrees of L1-L2 typological similarity influence the acquisition of L2 lexicalization patterns. It was found that intermediate learners with L2 Russian and L2 German, two L2s sharing the same lexicalization patterns as the target language (TL), Danish, a satellite-framed language, acquired target-like lexicalization patterns, overcoming the syntactic discrepancies to mark path and boundedness of motion. In contrast, learners with a typologically different L1, namely Spanish (i.e., a verb-framed language), expressed motion events in a significantly different way from the target-like patterns. Results of a vocabulary recognition task also indicated that Russian and German learners had larger L2 manner verb vocabulary than Spanish learners did. Cadierno attributed these results as a consequence of L1-influenced attention to the specific aspects of motion events (i.e., manner and path motion events) which are likewise encoded by the target language in the cases of L1 Russian and German learners, and attended differently in the case of L1 Spanish learners. However, whether or not the transfer of lexicalization patterns incontrovertibly indicates relativity effects remains an empirical question

because transfer of lexicalization patterns may be a manifestation of simple language transfer, which does not involve intervention of cognition.

In the course of her discussion, Cadierno raises the issues of accessibility and codability, which Slobin (2006) define as measures of saliency. In other words, according to Slobin, aspects of motion (e.g., manner) that are readily accessible (i.e., abundance in forms to express the semantic domain) and codable (i.e., the existence of forms to express the semantic domain) in a particular language are perceived as salient by the speakers of the language. Consequently, these speakers naturally pay attention to and elaborate on those salient aspects of events. The question here is whether it is target-like attention or target-like accessibility and codability – meaning that it has the target-like lexical form-meaning mapping in the interlanguage – which facilitates or hinders the acquisition of target lexicalization patterns in SLA settings.

The Spanish learners in Cadierno's study simplified the meaning of *gå* (walk) into an equivalent of general directional motion verb *go* while the other S-language learners did not. Cadierno attributes this to Spanish learners' lack of online attention, thus assuming that attention is the prerequisite to the acquisition of target-like vocabulary (i.e., accessibility and codability). However, it is equally possible that Spanish learners may have not been able to pay attention to manner because manner was not accessible or codable in their interlanguage, meaning they simply lacked the appropriate vocabulary. This study in any case provided interesting insights of the role of the language specific accessibility, codability and attention in the acquisition of L2 lexicalization patterns.

In Chapter 2, Hasko's study investigates advanced American learners' acquisition of L2 Russian directionality of motions, which Hasko terms (non)unidirectionality, via verbs. This study seems to contrast with Cadierno's study, in which the intra-typological difference, the existence and absence of the semantic distinction of non- vs. unidirectionality between the two S-languages, appears to be a source of difficulty for the advanced learners' acquisition of target-like lexicalization patterns. However, the two studies concur that the learners acquire forms, but the difficulty in the acquisition persists in the semantic domain, more specifically, how meanings are categorized and mapped onto forms. In Hasko's case, the formal similarity between English and Russian deceptively led learners to negatively transfer their L1 lexicalization patterns (overuse of non-unidirectional verb + goal/source satellite), regardless of the meaning and their sensitivity toward pragmatic contexts. Hasko ascribes the overuse of this particular construction to the learners' insensitivity toward the semantic distinction of (non)unidirectionality and the pragmatic context. Cadierno's study likewise illustrated how learners acquire target-like forms without target-like form-meaning mappings. The advanced Spanish learners of Danish, in her study, produced a construction of non-manner verbs+path satellites demonstrating the lack of a target-like meaning conflation pattern (manner+motion) into verbs while target-like construction patterns are in place. These results speak to the importance of the relativistic approach to SLA.

Stam, in chapter 3, incorporates gestures as a means to tap into learner meanings. Stam and other researchers (e.g., McNeill & Duncan, 2000) claim that gestures could be a sensitive technique for researchers to probe into speakers' mind and mental representations, complementing analyses on speech productions. She compared encodings of path and manner in learner speech production and their accompanying gestures in Spanish and English. Stam observed changes in the gestural and

lexical patterns both in the L1 and L2 over ten years of an advanced Spanish learner of English. The results showed that the learner's linguistic and gestural encoding of path became target-like in English, and encoding of manner in gestures and speech maintained the L1 pattern conforming with the results shown in Cadierno's study. Strikingly, the learners' L1 gestural encoding of path followed the English pattern in Stam's study, while her L1 Spanish utterances followed the L1 patterns. All of these results of the lexicalization pattern studies seem to boil down to the following account by Slobin (1996), which is later cited by Han in chapter 7 in this volume:

"The grammaticized categories that are most susceptible to [L1] influence have something important in common: they cannot be experienced directly in our perceptual, sensorimotor, and practical dealings with the world ... distinctions ... can only be learned through language, and have no other use except to be expressed in language ... Once our minds have been trained in talking particular points of view for the purpose of speaking, it is exceptionally difficult for us to be retrained" (Slobin, 1996, p. 91).

Conventry, Valdés, and Guijarro-Fuentes, in chapter 4, returns to the fundamental issue of relativity and attempted to examine the influence of L1-specific semantic category on cognition, specifically memory of spatial relations. Interestingly, the results indicated no effect of language-specific semantic category on memory. The authors attribute the results to the nature of the tasks, in which only visual, not linguistic, stimuli may have facilitated the participants' memory. In other words, as the participants did not need to rely on linguistic stimuli to memorize the spatial relations, they did not linguistically process the spatial relations. Regardless of the limitations of the design, the authors raise an important point – that the results cast doubt on linguistic determinism. The native speakers' L1-specific semantic system, at least in this study, did not interfere with memory of spatial relations. The non-linguistic spatial perception, which is uniform across languages (e.g., Pinker, 1994; Slobin, 1996), overrode language-specific semantic categories. It is vital then to explore when and under which circumstances language-specific systems interfere in cognition. This study reminds us of the importance of critically examining and reporting on cases of non-transfer as well as evidence of transfer.

Interestingly, the perspective that meanings may be distributed over multiple forms challenges Stringer's lexical view of thinking-for-speaking. In chapter 5, Stringer puts forward a lexicalist approach to relativity, asserting that transfer takes place item by item, as it is each lexical item that packages meaning components and its syntactic effects. His argument is significant in the sense that it incorporates non-Indo-European languages as the core of its argument. It is undeniable that the theories adopted in SLA research are English-centered, and some extensions of the theories may not be applicable to some non-Indo-European languages (e.g., East Asian languages classified as pro-drop languages, and the nature of dropping noun phrases seem to be dramatically different from that of Romance languages). In his argument, Stringer focuses on cases that could be regarded as "exceptions" in Talmy's typological view, and provides explanations as to how these "exceptions" corroborate with the lexicalist view. However, a considerable amount of conceptual and empirical work is necessary in order for this lexicalist view to grow into an SLA theory that is capable of explaining the acquisition of all languages.

In the course of L2 acquisition, the semantic conflation of manner and motion in verbs "cannot be experienced directly in our perceptual ... dealings, and can only be learned through

language” (Slobin, 1996, p. 91), while the elaboration of path with satellites is physically visible and audible in the input. In an attempt at a more fine-tuned investigation on learners’ intended meaning – which “can only be learned through language” – Ekiert and Han explore learners’ form-meaning mappings of L2 English articles in longitudinal case studies.

Ekiert, in chapter 6, examines the intended form-meaning mappings in L2 English articles of three advanced Polish learners through analyzing their article use and their reasoning of their article choices. The stimulated recall task, in which the participants provided the reasons for their article choice in an error correction task, revealed that the learners’ hypotheses as to what (in)definiteness entails were non-target-like but rather rooted in their L1 rules. The learners’ L1, Polish, for example, expresses the referent’s (in)definiteness or specificity by placing the noun phrase at a sentence initial position. Consequently, when a definite noun appears at a sentence initial position, they omitted the “redundant” definite articles. This shows that the learners failed to recognize the function of definite articles, which necessarily mark identifiability of the referents.

Similarly in chapter 7, Han conducted a detailed examination of learners’ mental representation of L2 English articles. The study examined the use of English articles and plurals by an adult native speaker of Chinese who had been residing in an English-speaking country for 12 years. Through analyzing both naturalistic and stimulated data, this study provides yet another piece of evidence of linguistic relativity, or L1- meaning-constrained L2 mental representations. Han’s subject, Geng, tended to pluralize quantified nouns and unmarked plurality of nouns without classifiers regardless of the countability of the nouns, and tended to mark specificity with English definite articles. Han points out that the marking of plurality and specificity corresponds to the Chinese plural and specificity marking system. Taken together, the studies of Ekiert and Han support Slobin’s statement that “distinctions that can only be learned through language, and have no other use except to be expressed in language ... Once our minds have been trained in talking particular points of view for the purpose of speaking, it is exceptionally difficult for us to be retrained.” (1996, p. 91)

One noteworthy point is that Ekiert and Han share similar philosophy with regard to study designs. First, both Ekiert and Han recognize the importance of cross-examining and analyzing target features via looking into both naturalistic and elicited data. Han asserts that “naturalistic data alone ... are insufficient to motivate a robust understanding of the learnability problem unless supplemented by focused data elicited via contrived tasks” (p. 181). Second, both have conducted extensive qualitative analysis in light of the linguistic, semantic and pragmatic environments of the target language use, as well as the use of other forms that may influence on the use of the target forms (e.g., use of possessives, quantifiers, demonstratives, and plural markers). Han contends that a cohort of forms should be analyzed in lieu of isolated morphemes because meanings are often mapped onto a cohort of forms. Given the current inclination to value inferential statistics and statistic significance in SLA research, these studies serve as a good reminder of the importance and fruitfulness of in-depth qualitative analysis.

In the concluding chapter, Odlin discusses the distinctions among language transfer, meaning transfer, conceptual transfer, and relativity. Although he only alludes to the distinction between relativity and conceptual transfer, stating “work on relativity and work on conceptual transfer are interdependent” (p. 193), he emphasizes the distinction between conceptual transfer and language transfer: Conceptual transfer involves influence on something beyond language, such as concepts and cognition. In terms of meaning-concept distinction, he defines conceptual transfer as a subset of meaning transfer, which

indicates that all conceptual transfer involves semantic transfer. In sum, his argument reduces to the following statement about the relationship among language transfer, meaning transfer, conceptual transfer, and relativity: Relativity explains the L1 influence on L2 production via L1-based cognition (processing/ representations) as a media of the formal language transfer. Hence, what is crucial in relativity studies is to capture the L1 influence on cognition, and the influence of L1 relativized cognition on L2 acquisition.

This well-edited collection achieves its goals: it captures and substantiates the emerging interest among SLA researchers in Slobin's (1996) thinking for speaking hypothesis. It provides not only a general overview of linguistic relativity in SLA but also a current understanding of the role of relativity in SLA. The findings and discussions were thought provoking, revealing the potential of a relativistic view in SLA. This volume is equally valuable to both cognitive linguists and scholars working on second language acquisition.

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